### March

### 1987 PAARA

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THE OFFICIAL NEWSLETTER
OF THE PALO ALTO AMATEUR
RADIO ASSOCIATION
AND

THE MENLO PARK C.D. AMATEUR RADIO CLUB

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And a few anonymous, but very important publication people!

### PAARA Policies

Membership in PAARA is \$6.00 per calender year which includes a subscription to *PAARA graphs*: Make payment to the Palo Alto Amateur Radio Association, P.O. Box 911, Menlo Park, CA 94026

### Club Net on 147.45 MHz Mondays at 8:30 P.M.

Meetings monthly at the Menlo Park Recreation Center at 7:30 P.M., the first Friday of the month.

## March 1987

### From the Editor's Desk:

### Here's some information which may interest you from WAGLIJ:

Freebie Time Selector. If it is 0900 in San Francisco, what time is it in Sydney, Hong Kong or London? Call AT&T's International Caller Club at 1-800-443-5550 and ask for AT&T's "International Time Wheel". It is a free circular slide rule for determining time in other time zones.

Santa Claus has a home. On December 17, 1986 I had a pleasant QSO with OH9LA, Veli Lehto in Rovaniemi, Finland on 20 meters. Several days later I read an article in the newspaper that Rovaaniemi had been declared the official home of Santa Claus and, furthermore, Santa has a radio station. I sent the article to Veli and in the return mail I received his QSL card and that of Santa, OH9SCL ("SCL" for Santa Claus Land), SCL-ARS, Arctic Circle, 96930 Rovaniemi, Finland. So next December call Santa on amateur radio and tell him what you want for Christmas.

Jerry also has some equipment (Swan Mark II 2000 Watt Linear Amplifier: Tri-Ex W-25, 3 section 11-25 foot tower; Ezy-Way 40 ft. freestanding tower, and a Tri-Ex base for W-51 and W-25.). For details contact Jerry Starkey, WA6LIJ, at (415) 964-6584 in Los Altos.

### SPEAKER OF THE MONTH:

Fred Dietrich, NM6J, will discuss the "Poor Man's Homebuilt Spectrum Analyser". A lecture and demonstration will be given on general useage, building technique, and technical ideas on application. A spectrum analyser is an important tool; don't miss this month's meeting.

This article submitted by W6ANT and W6APZ from *T.E.S.O.L.* December, 1986 issue. For information on T.E.S.O.L. (Teachers of English to Speakers of Other Languages) contact W6ANT and W6APZ at (415) 494-0122.

### Amateur Radio in the ESL Classroom

by George Kerasiotis New York City Board of Education

The teacher of English as a second language (ESL) is faced with a difficult problem. How does he get English language students from ethnic communities out of their respective communities and make them aware of the fact that Brooklyn and the Lower Eastside are not the only places in America and that there are 49 other states outside of New York, complete with regional accents, speech patterns, and customs?

Unfortunately, the ESL teacher can not charter a jet and fly his students down South to practice English with our neighbors in the land of Dixie or to our friends in the Midwest; but if a teacher can not bring the classroom to other parts of America, why not bring other parts of

America into the classroom?

That is exactly what Joe Fairclough and I did. We are both teachers in the New York City Board of Education System. Joe teaches ESL to 7th and 8th graders on the lower eastside of Manhattan, and I teach ESL for the Adult Basic Program at one of its sites in Brooklyn.

But we have more in common than teaching ESL; we are both amateur radio operators, better known as "hams." Not to be confused with CB radio, ham radio enthusiasts, licenced by the Federal Communications Commission, are able to talk to people all over the world.

I was inspired by Joe Fairclough who, with Board A Education approval, incorporated amateur radio into his curriculum several years ago. He teaches in a disadvantaged area where absenteeism is high and motivation is low, and ham radio is a way to keep his students interested and in school; on the other hand, I teach highly motivated adults who lack the opportunity and sometimes the confidence to get out of their ethnic communities and experience the American mainstream.

On May 22, 1986 Joe and I put our hobby to use in the ESL classroom. With radio gear set up in each classroom, one in Brooklyn and one in Manhattan, our students were able to



George Kerasiotis (center) with Egyptian, Japanese and Hispanic students at the Dr. White Community Center in Brooklyn, New York, spring 1986.

communicate and practice English with each other via radio, thus linking the Adult Basic Program with the regular day school in a learning experiment which bridged the generation gap.

During the latter part of the experiment, several ham radio operators from different parts of the country participated with my students in Brooklyn. I had reviewed basic information questions such as "Where do you live?" and "What's your favorite TV show?" the day before so that the students would be able

to converse confidently on the air. As it turned out, much more than English practice with native speakers was going on: an exciting cultural exchange was taking place. In one instance, one of my ESL students from Egypt was talking to a man in Youngstown, Ohio, and he asked him, "What's your favorite food?" The man replied, "Bacon and eggs." He then asked the student the same question, and the student from Egypt replied, "Falafel and shishkebab. Totally perplexed, the man from Ohio asked the student to describe those two Middle Eastern delights and there ensued a conversation which benefitted both the ESL student from Egypt and the American from Youngstown, Ohio

This experiment with amateur radio in the ESL classroom has proven to be a valuable

teaching tool for me. It can do the seemingly impossible: it has brought the classroom out of its little corners in Brooklyn and Manhattan and has brought little corners of America and its people into the classroom.

About the author: In addition to tracking ESL and bring a ham radio operator. George Areanotts is an oil parties and reverb had an exhibit of an passings at the Belanthe Gallery in Brooklyn. Other ESL "harms" may want to write to ham 485 Eleventh Street, Brooklyn, NY 11835, U.S. A.



LANGUAGE OF THE AIR FORCE

Publication of Francis Cartier's ESP text, The Language of the Air Force in English, has been discontinued by Regents Publishing Company. However, it is still being used, e.g., by foreign air force training programs. Requests for licensing to reproduce it should now be addressed to CASCommunicating, 1029 Forest Ave., Pacific Grove, CA 80850-4814.

### Enhancement!

I hope you all are aware of the new FCC novice enhancement. The novice written test will be made somewhat more difficult, and the code will be kept at 5 w.p.m. The novices (and technicians) will now be granted some frequencies and modes which they have previously only been able to yearn for. Ten meter voice and data communications is now possible for novice and technicians (or as soon as the details are released). Novices will also get 220 MHz rights, all modes, and limited to 5 watts P.E.P. For more details, I suggest you check this month's QST and stay tuned for something in PAARAgraphs about the enhancement.

I also hope that more of our members would participate in the newsletter by contributing articles. The above mentioned enhancement is a fertile subject. How about some enlightening debate? Articles are due one week before the PAARA meeting (the first Friday of every month).

Thanks for your support--de KB6BPM

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KA6PL0, 415-941-5541. PM Newsletter. ARES affiliation. Info: Ted, N611U, 415-322-2143 or Harry, NASA satellite communications. Meets last Wednesday of the month. 7:30 National Red Cross. Active in HF, packet & BBS, ATV, Oscar, Amtor and Provides worldwide amateur radio communications under agreement with

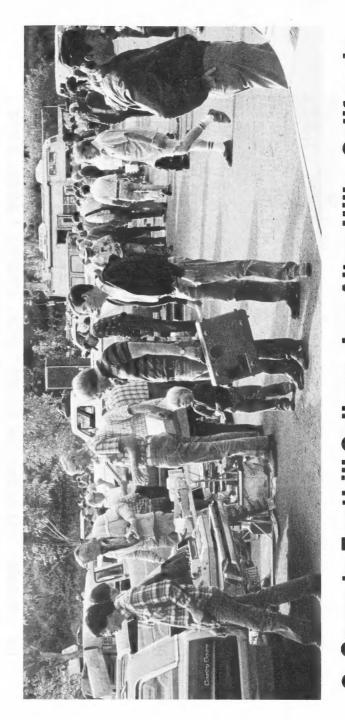
408-739-5546 ELECTRONIC MUSEUM AMATEUR RADIO CLUB (EMARC) Novice classes. Meets at Foothill College, Electronics Museum, first Friday 7:30PM. Newsletter. Talk-in 145.27/R. Contact Bob, KB6FEC

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College. Museum hours call Len, W6FKF, 415-960-4383 and EMARC club meetings. Sponsors all Electronic Flea Markets at Foothill PERHAM FOUNDATION Uperates the Foothill Electronics Museum for Foothill College. Hosts FARS

Day. Newsletter. Net meets 147.45 simplex, Mondays 8:30 PM. Info: Gerald, Meets first Friday of month. Menlo Park Recreation Center. Active on Field PALO ALTO AMATEUR RADIO ASSN. (PAARA) WA6LNV, 415-326-4908

# FOOTHILLS AMATEUR RADIO SOCIETY (FARS)

Meets last Friday of the month. Foothill College, Electronics Museum. to Mt. Tam, Field Day, 10 Meter contest. Newsletter. Contact: Herb, N6BC, Talk-in 145.27/R. Offers General/advanced classes. Events: annual outing

### **VEC EXAMINATIONS** 415-941-3794

2nd Saturdays. Info: W6NLG, Gordon, 408-255-9000. tests 1 PM till 2 PM. Test location: Electronics Museum, Foothill College, Amateur radio exams. Cosde tests (20-5 WPM) 12 noon till 1 PM. Written This is the second part of an article submitted by Robert Taylor, KA6NAN, reprinted with permission from G.4 TEWAY, the ARRL's packet newsletter:

### **NETWORK MANAGEMENT: A GROWING NEED (PART II)**

If they both transmit at the same time, only one can possibly be properly received by the digipeater. If both signals are of nearly the same strength at the digipeater, chances are that neither signal will be properly received. It is not always apparent that this is the mechanism causing the delays encountered during a connection, but it is nearly always so. TNCs are designed to defer their transmission if another packet signal is heard on frequency. The operative word here is if. Take the case of the mountaintop digipeater being used by stations on different sides of the mountain. Since they can't hear one another, they often will transmit at the same time. To each operator, the frequency seems clear, but to the digipeater there are two competing signals. Thus is a collision born.

Of course, on a multiple-digipeater path, the potential for collisions exists at the receiver of each digipeater along the path, as well as at the destination TNC. It is this increased collision rate that makes a multiple-digipeater path fail more readily than a single-digipeater path. It is my observation that most of the problems encountered are with collisions between a digipeater transmission and that of another station, either another digipeater or home station. (This observation is based on what signals I can see from my location, not on hard statistical evidence.)

One way of reducing the number of collisions is to move the digipeaters to separate frequencies, much as is done with voice repeaters. The problem is that, since the digipeaters could no longer hear one another, doing so would eliminate the multiple-digipeater paths that have become such an integral part of packet radio. There are technical solutions to this loss of linking. The principal one is the use of multiple-port digipeaters. Such machines have two ports that operate independently, one on the local-user frequency and one on the linking frequency. As the name implies, the local-user frequency is the frequency on which local stations communicate with the digipeater. The linking frequency is used strictly to communicate with other digipeaters. Multiple-port digipeaters exist today and are being operated in a number of locations throughout the country. Nonetheless, present-day packet radio operates mostly through the use of single-port machines.

The third and final section of this article by Jon Bloom, KE3Z, will appear in next month's issue. --de KB6BPM.

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